



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,873	04/03/2002	Neill Rawson	GJE-90	1428
23557	7590	04/22/2004	EXAMINER	
SALIWANCHIK LLOYD & SALIWANCHIK A PROFESSIONAL ASSOCIATION 2421 N.W. 41ST STREET SUITE A-1 GAINESVILLE, FL 326066669			YAO, SAMCHUAN CUA	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/089,873	Applicant(s) RAWSON ET AL.	
	Examiner Sam Chuan C. Yao	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 April 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 1-8, 10 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>06-27-02</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-8, drawn to an abrasive material or a method of abrading a surface.

Group II, claim(s) 9 and 11, drawn to a method of making an abrasive material and the product thereof.

Group III, claim(s) 10 and 12, drawn to a method of making an abrasive material and the product thereof.

2. The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

The independent claims in group I have (for instance) the following special technical feature (**A**): *"an integral mass ... substantially held together solely by entanglement forces ..."* (emphasis added).

The independent claims in group II have (for instance) the following special technical feature (**B**): *"passing the resultant material to a fibre-opening machine to wholly or substantially separate the fibres from one another"* (emphasis added).

The independent claims in group III have (for instance) the following special technical feature (**C**): *"shredding the resultant material to produce thin strips of material"* (emphasis added).

Group I requires special technical feature **A**, but not **B** or **C**.

Group II requires special technical feature **B**, but not **A** or **C**.

Group III requires special technical feature **C**, but not **A** or **B**.

For these reasons, the holding that these groups do not relate to a single general inventive concept is proper.

Art Unit: 1733

3. During a telephone conversation with Mr. David Saliwanchik on 04-05-04 a provisional election was made **without** traverse to prosecute the invention of Group II, claims 9 and 11. Note: during a telephone conversation with Mr. Saliwanchik on 04-16-04, Examiner agreed to assign claim 11 to an elected Group II (claim 9). Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-8, 10 and 12 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 9 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims are indefinite, because the phrase "*the resultant material*" does not have a positive antecedent basis. This phrase is assumed to be referring to a cured fleece. Moreover, the limitation "*resin and binder*" is also confusing. Does

Art Unit: 1733

this requires a combination of a binder and a resin **or** simply a resin binder? This limitation is assumed to require the latter (i.e. a resin binder).

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by either Heyer et al (US 5,363,604) or Heyer et al (US 5,685,935).

Since the resultant abrasive articles in Heyer et al '604 and Heyer et al '935 as well as a resultant abrasive article in this claim are an open, lofty non-woven mass of abrasive coated fibers, the limitations in this claim are anticipated by Heyer et al '604 and Heyer et al '935.

It is now well settled, "If the product in the product by process claim is the same as or obvious from the product of the prior art, the claim is unpatentable even though the prior art product was made by a different process." In re Thorpe, 777 f.2d 695,698,227 USPQ 964 966 (Fed. Cir. 1985). Moreover, "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. In re Fessmann, 489 F2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the Examiner provides a rationale tending to show that the claimed product appears to be the same or similar to

Art Unit: 1733

that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802,218 USPQ 289, 292 (Fed. Cir. 1983).

Note further: Where ... the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product. **Whether the rejection is based on "inherency" under 35 USC § 102, on prima facie obviousness" under 35 USC § 103, jointly or alternatively, the burden of proof is the same, and its fairness is evidenced by the PTO's inability to manufacture products or to obtain and compare prior art products."** *In re Best*, 562 F2d 1252, 1255, 195 USPQ 430, 433-4 (CCPA 1977).

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heyer et al (US 5,685,935) in view of Heyer et al (US 5,363,604).

At the outset, it should be noted that, claim 11 is taken to be anticipated by Heyer et al '935 in numbered paragraph 8 above. This alternative rejection is made in case the abrasive coating process recited in claim 11 materially changes the structure of a resultant open nonwoven abrasive pad so as to define over an open nonwoven abrasive pad of Heyer '935.

Heyer et al '935 discloses a process of making an open, lofty, nonwoven abrasive pad, the process comprises partially impregnating a melt-bonded densified fiber web with a blend of a resin binder and abrasive particles; wherein the fiber web includes thermoplastic binder fibers, curing the resin binder to form a cured densified fiber web; and then, subjecting the cured densified fiber web to a *"rebulking station 28, which is preferably a heated air space, where the web is heated to remelt"* the binder fibers thereby forming a rebulked web (col. 3 lines 40-53; col. 4 lines 33-67; col. 5 lines 5-52; col. 9 line 26 to col. 10 line 31; figures 1-2). Note: a term machine is broadly interpreted to read on an apparatus/device, for this reason, a fiber-opening machine fails to distinguish over a rebulking station taught by Heyer '935.

Heyer et al '935 does not teach spraying a fiber web with a resin binder and then spreading an abrasive to the binder coated fiber web. However, it would have been obvious in the art to spray a fiber web with a resin binder and then spreading an abrasive to the binder coated fiber web as such is a well known effective method of applying an abrasive material to a fiber web as exemplified in the teachings of Heyer '604.


**Conclusion**

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sam Chuan C. Yao  
Primary Examiner  
Art Unit 1733